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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,527	01/03/2006	Frank Exeler	112740-1119	1503
29177 7590 08/11/2008 BELI., BOYD & LLOYD, LLP P.O. BOX 1135 CHICAGO, IL 60690			EXAMINER ANWAR, MOHAMMAD S	
			ART UNIT 4125	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/563,527

Applicant(s)

EXELER ET AL.

Examiner

MOHAMMAD ANWAR

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 12-22 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 03 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/563,527.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date 1/3/06, 3/22/06
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to because Figures 1 and 2 should be labeled with descriptive legends e.g. BS should be labeled as Base Station. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 12,15, and 18 are objected to because of the following informalities:

In claim 12 lines 6-7 recites "a repeat time slot" which seems to refer to "a repeat time slot" in claim 12 line 5. If this is true it is suggested to change "a repeat time slot" to ---the repeat time slot---. Similar problem exists in claim 18 lines 1-2.

In claim 15 line 2 recites "radio transmitters and radio receivers" which seems to refer to "a plurality of radio transmitters and radio receivers" in lines 3-4 of claim 12. If this is true it is suggested to change "radio transmitters and radio receivers" to ---the radio transmitters and receivers---.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13,14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13 line 3 recites "the radio coverage area" which has no antecedent basis.

In claim 14 line 3 recites "the time-slot separation method" which has no antecedent basis.

In claim 16 line 6 recites "the time-slot separation" which has no antecedent basis.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 12-14, 19 and 21 are rejected under 35 U.S.C. 102(b) as being unpatentable by Fazel (6275506, 5896375).

For claim 12, Fazel et al. disclose a method for transmitting packet data in a radio telecommunications system (see column1 lines 6-7, column 7 lines 5-6) comprising allocating a unique identifying frequency to each of a plurality of radio transmitters and radio receivers (see column 4 lines 62-63, column 6 lines 45-50), detecting whether a repeat time slot is used (see column 3 lines 25-31, column 7 lines 10-34); performing frequency-slot separation on to-be-repeated data packets if a repeat time slot is detected, wherein the frequency-slot separation assigns the to-be-repeated data packets to a respective unique identifying frequency, and wherein the frequency-slot separation is carried out within the duration of the repeat time slot (see Column 5 lines 56-61), and performing frequency selection in at least one of the radio transmitters and receivers wherein a repeated data packet is searched on the respective identifying frequency (see column 10 lines 34-44).

For claim 13, Fazel et al. disclose wherein the step of allocating the unique identifying frequency is performed once as part of an initialization of the radio coverage

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area, with the allocation being stored at least temporarily in the radio transmitters and radio receivers (see column 5 lines 24-46, column 10 lines 15-33).

For claim 14, Fazel et al. disclose the step of allocating the unique identifying frequency is carried out at the start of each transmission frame in accordance with the time-slot separation method (see column 7 lines 1-9, lines 46-48).

For claim 19, Fazel et al. disclose wherein the allocation of frequencies is calculated within each of the radio transmitters and radio receivers (see column 5 lines 31-34).

For claim 21, Fazel et al. disclose wherein radio telecommunications system operates in accordance with the Digital Enhanced Cordless Telecommunication (DECT) or Worldwide Digital Cordless Telecommunications (WDCT) standard (see column 2 lines 62-67).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 15-18, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fazel et al. in view of Dent et al. (5896375).

For claim 15, Fazel et al. disclose all the subject matter but fails to mention wherein an allocation of frequencies to radio transmitters and radio receivers is implemented in such a way that each radio transmitter and radio receiver is allocated a sequence with a unique starting value. However, Dent et al. from a similar field of endeavor disclose wherein an allocation of frequencies to radio transmitters and radio receivers is implemented in such a way that each radio transmitter and radio receiver is allocated a sequence with a unique starting value (column 7 lines 42-67, column 8 lines 1-6). Thus, it would have been obvious to one ordinary skill in the art at the time invention was made to include Dent et al. allocation and sequencing scheme into Fazel et al. packet transmission in a radio network. The method can be implemented in the hardware and software. The motivation of doing this is to avoid collision.

For claim 16, Fazel et al. disclose all the subject matter but fails to mention wherein the frequency-slot separation and selection steps are performed if, in a radio coverage area of the radio telecommunications system, it is determined before the start of a transmission frame that a first number of radio transmitters and radio receivers located in a radio coverage area exceeds a second number in the radio coverage area according to the repeat time slots available with the time-slot separation. However, Dent et al. from a similar field of endeavor disclose wherein the frequency-slot separation and selection steps are performed if, in a radio coverage area of the radio telecommunications system, it is determined before the start of a transmission frame that a first number of radio transmitters and radio receivers located in a radio coverage area exceeds a second number in the radio coverage area according to the repeat time

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slots available with the time-slot separation (see column 8 lines 23-67, column 9 lines 1-67). Thus, it would have been obvious to one ordinary skill in the art to include Dent et al. time slot separation and detection scheme into Fazel et al. packet transmission scheme. The method can be implemented in the hardware and software. The motivation of doing this is to properly detect and assign time slots and frequencies in multiple networks.

For claim 17, Fazel et al. disclose all the subject matter but fails to mention wherein the frequency-slot-separation and selection steps are performed for each repeat time slot. However, Dent et al. from a similar field of endeavor disclose in detail wherein the frequency-slot-separation and selection steps are performed for each repeat time slot (see column 14 lines 33-67 and column 15 lines 1-31). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Dent et al. retransmission scheme into Fazel et al. data transmission scheme. The method can be implemented in the hardware and software. The motivation of doing this is to allocate transmission slot for retransmission packets.

For claim 18, Fazel et al. disclose all the subject matter but fails to mention wherein a repeat time slot is used due to the absence of an acknowledgement message from a receiving radio transmitter/radio receiver. However, Dent et al. from a similar field of endeavor disclose wherein a repeat time slot is used due to the absence of an acknowledgement message from a receiving radio transmitter/radio receiver (see column 15 lines 6-8). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Dent et al. packet acknowledgment scheme

into Fazel et al. transmission scheme. The method can be implemented in the packet header. The motivation of doing this is to error free data transmission.

For claim 20, Fazel et al. disclose all the subject matter but fails to mention wherein calculation takes place on the basis of unique identifying information known to the radio telecommunication system. However, Dent et al. from a similar field of endeavor disclose wherein calculation takes place on the basis of unique identifying information known to the radio telecommunication system (see column 10 lines 20-31). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Dent et al. identifying scheme into Fazel et al. transmission scheme. The method can be implemented in the hardware and software. The motivation of doing this is to ensure that a collision does not take place.

11. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fazel et al. in view of King et al. (5864755).

For claim 22, Fazel et al. disclose all the subject matter but fails to mention wherein an International Portable User Identity (IPUI) is used as identification information. However King et al. from a similar field of endeavor disclose wherein an International Portable User Identity (IPUI) is used as identification information (see column 2 lines 54-65). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include King et al. identification scheme into Fazel et al. transmission scheme. The method can be implemented in the software program. The motivation of doing this is to for properly identify the mobile phones.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Raith et al. (5734645) and Diachena et al. (5577046).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD ANWAR whose telephone number is (571)270-5641. The examiner can normally be reached on Monday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571-272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MOHAMMAD ANWAR

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Examiner
Art Unit 4125

/M. A./

Examiner, Art Unit 4125

/DANG T TON/

Supervisory Patent Examiner, Art Unit 2616/D. T. T./

Supervisory Patent Examiner, Art Unit 2616